

GILA RIVER BASIN

09473000 ARAVAIPA CREEK NEAR MAMMOTH, AZ

LOCATION--Lat 32°50'37", long 110°37'09", in NW_{1/4}NW_{1/4} sec. 9, T.7 S., R.17 E., Pinal County, Hydrologic Unit 15050203, on right bank 6 mi upstream from mouth and 9 mi north of Mammoth.

DRAINAGE AREA--537 mi².

PERIOD OF RECORD--May 1931 to Dec. 1942 (published as "near Feldman"), May 1966 to current year. Monthly discharge only July 1941 to Sept. 1941, published in WSP 1313.

REVISED RECORDS--WDR AZ-68-1: 1967. WDR AZ-82-1: 1968, 1969, 1973, 1979 (M). WDR AZ-90-1: Drainage area.

GAGE--Water-stage recorder and, since Mar. 1980, crest-stage gage. Elevation of gage is 2,345 ft above sea level, from topographic map. Oct. 1, 1981, to Oct. 1, 1983, gage at site 300 ft upstream at datum 4.19 ft higher. Prior to Oct. 1, 1981, at datum 1.00 ft higher. May 1931 to Dec. 1942 at site 0.3 mi downstream at different datum.

REMARKS--Records good except for estimated daily discharges, which are poor. Diversions for irrigation of several hundred acres above station.

EXTREMES FOR PERIOD OF RECORD--Maximum discharge since at least 1919, 70,800 ft³/s Oct. 1, 1983, from slope-area measurement of peak flow, gage height, 16.76 ft, from profile past gage; minimum, 0.3 ft³/s Aug. 30, 1940.

EXTREMES OUTSIDE PERIOD OF RECORD--A discharge of 20,000 ft³/s occurred Aug. 2, 1919, at site of former gaging station 6 mi downstream, operated Apr. 1919 to Sept. 1921, gage height, 6.3 ft, from floodmark, site and datum then in use, from rating curve extended above 5,100 ft³/s on basis of velocity-area study.

EXTREMES FOR CURRENT YEAR--Peak discharges greater than base discharge of 2,500 ft³/s and (or) maximum (*), from rating curve extended above 130 ft³/s on the basis of slope-area measurement at gage height 16.76 ft:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 5	1215	*1,860	*5.07

Minimum daily discharge, 0.60 ft³/s July 12.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	8.3	14	16	14	14	16	6.4	2.2	1.0	3.9	5.8
2	4.8	8.5	14	16	14	14	16	6.2	2.1	0.93	3.8	5.7
3	4.3	8.9	14	16	13	14	18	5.9	2.0	0.89	3.8	e5.6
4	4.1	9.1	14	16	13	18	18	5.6	1.9	0.77	3.8	6.7
5	4.2	9.4	14	16	13	461	18	5.2	1.7	0.77	3.9	7.3
6	4.4	9.4	14	16	13	143	16	4.8	1.7	0.70	4.1	6.9
7	4.8	9.8	14	16	13	62	15	4.5	1.7	0.87	4.3	6.4
8	5.4	10	15	16	13	43	15	4.3	1.7	0.84	4.5	5.9
9	5.4	10	15	16	13	38	15	4.1	1.7	0.77	5.4	5.8
10	5.6	11	15	15	13	37	14	3.6	1.7	0.62	7.2	5.6
11	5.5	11	15	15	13	33	14	3.7	1.9	0.65	5.0	5.7
12	5.5	12	16	15	13	32	14	3.2	1.8	0.60	4.8	5.8
13	5.6	13	15	16	12	34	13	3.2	1.7	0.75	5.0	5.7
14	5.7	12	15	15	12	33	12	3.1	1.5	2.9	9.1	5.7
15	5.7	12	15	16	12	29	12	3.0	1.4	4.4	8.2	5.7
16	6.0	12	15	15	12	27	12	2.9	1.4	3.8	23	5.8
17	6.0	13	15	15	12	25	11	2.6	1.3	3.9	29	5.8
18	6.1	13	15	15	12	25	10	2.7	1.3	3.6	15	24
19	6.2	13	15	15	13	23	10	2.7	1.3	4.0	13	14
20	6.4	13	15	15	13	22	9.9	2.4	1.2	3.4	e12	9.8
21	6.4	13	15	15	13	20	9.5	2.3	1.2	3.1	10	8.4
22	6.5	13	15	15	13	20	9.2	2.4	1.2	3.2	8.4	7.4
23	6.6	13	16	15	14	19	8.9	2.2	1.2	3.4	8.2	6.6
24	6.8	13	16	15	13	20	8.6	2.5	1.4	4.9	9.0	5.8
25	6.8	13	16	15	13	19	8.2	2.6	1.3	4.4	7.4	6.0
26	7.2	13	16	16	13	19	7.8	2.7	1.3	4.3	7.0	5.7
27	7.4	13	16	15	14	19	7.1	2.6	1.2	4.3	6.6	4.9
28	7.7	14	16	15	14	17	6.8	2.6	1.2	4.2	6.3	5.0
29	7.7	14	16	15	14	17	6.5	2.4	1.1	4.1	6.1	4.8
30	8.0	14	16	15	---	17	6.6	2.3	1.1	4.1	6.0	5.0
31	8.1	---	16	15	---	16	---	2.2	---	3.9	5.9	---
TOTAL	186.0	351.4	468	477	377	1330	358.1	106.9	45.4	80.06	249.7	209.3
MEAN	6.00	11.7	15.1	15.4	13.0	42.9	11.9	3.45	1.51	2.58	8.05	6.98
MAX	8.1	14	16	16	14	461	18	6.4	2.2	4.9	29	24
MIN	4.1	8.3	14	15	12	14	6.5	2.2	1.1	0.60	3.8	4.8
AC-FT	369	697	928	946	748	2640	710	212	90	159	495	415
CFSM	0.01	0.02	0.03	0.02	0.08	0.02	0.02	0.01	0.00	0.00	0.01	0.01
IN.	0.01	0.02	0.03	0.03	0.09	0.02	0.01	0.00	0.01	0.02	0.01	0.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 2004, BY WATER YEAR (WY)

MEAN	44.4	23.4	46.1	51.5	63.0	57.3	20.7	14.4	11.6	23.5	30.8	23.6
MAX	1098	91.1	474	682	215	349	53.1	44.8	40.1	115	133	55.8
(WY)	1984	1979	1979	1993	1983	1991	1993	1979	1940	1942	1935	1984
MIN	6.00	8.70	9.69	10.1	11.1	9.49	7.17	3.45	1.51	2.58	7.81	5.35
(WY)	2004	1940	1971	1940	1977	1976	1976	2004	2004	1975	1975	1973

SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR WATER YEARS 1932 - 2004

ANNUAL TOTAL	5639.6	4238.86	
ANNUAL MEAN	15.5	11.6	34.1
HIGHEST ANNUAL MEAN			140
LOWEST ANNUAL MEAN			9.62
HIGHEST DAILY MEAN	344	Jul 30	1976
LOWEST DAILY MEAN	2.7	Jul 10	1940
ANNUAL SEVEN-DAY MINIMUM	2.8	Jul 6	0.40
ANNUAL RUNOFF (AC-FT)	11190	8410	Aug 29 1940
ANNUAL RUNOFF (CFSM)	0.029	0.022	0.063
ANNUAL RUNOFF (INCHES)	0.39	0.29	0.86
10 PERCENT EXCEEDS	24	16	45
50 PERCENT EXCEEDS	14	8.9	16
90 PERCENT EXCEEDS	3.5	1.7	6.0

e Estimated